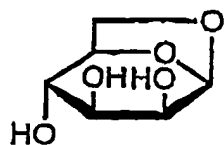


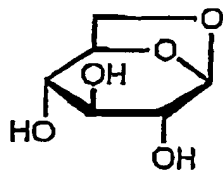
## REMARKS

The rejection of claims 34 and 35 for indefiniteness is respectfully traversed. Claims 34 and 35 show polymeric structures. It is seldom possible to depict an entire polymeric molecule and it is conventional in the art to depict a polymeric structure with "unspecified ends". See, for example, the "unspecified ends" of the structures depicted in "Scheme A" at the top of page 1996 of Satoh et al. The definiteness requirement of 35 USC 112, second paragraph, has been construed as requiring no more than sufficient preciseness that one skilled in the art can determine what does and what does not fall within the scope of the claims, i.e. what does and what does not infringe. *In re Conley*, 180 USPQ 454 at 456 (CCPA 1974). Here, certainly, one skilled in the art would know what does and does not infringe claims 34 and 35. For example, if a polymer were to include the structure of claim 34, that polymer would be in the scope of claim 34. Conversely, polymers not including the depicted structure would not be in the scope of claim 34.

The rejection of claims 1-4, 7-8, 26-27 and 30-32 for anticipation by Toshifumi. It is not clear from the abstract whether Toshifumi et al polymerize the 1,6-anhydro- $\beta$ -D-mannopyranose and 1,6-anhydro- $\beta$ -D-glucopyranose separately to form homopolymers or together to form a copolymer. However, the distinction does not appear to be relevant. The two monomers polymerized by Toshifumi et al have the following structures:



1,6-Anhydro-β-D-mannopyranose



1,6-Anhydro-β-D-glucopyranose

As can be seen from a comparison of the above monomers of Toshifumi et al with the monomers of formulas (1) and (2) recited in the rejected claims, for the dianhydrosugar alcohol and the anhydrosugar alcohol, respectively, the monomers of Toshifumi et al are not the same as, and indeed are not even similar to, those of applicants' formulas (1) and (2). Because the monomers of Toshifumi et al are very different from applicants' monomers, the polymers and (copolymers ?) thereof will necessarily be very different from those of applicants. Note that in claim 2 one of the monomers must be selected from group I, i.e. (1) and/or (2). Claim 2 recites that the copolymer is derived from at least one monomer of group I and at least one sugar compound of group II.

The rejection of claims 1, 3, 4, 7 and 8 for anticipation by Sunder et al is respectfully traversed based on the present amendment to claim by which formula (2) has been amended so that it no longer reads on glycidol. As the Examiner notes, in formula (2) recited by claim 1, where m is zero,, R1 and R4 are H and p is 1, formula (2) becomes the formula for glycidol, which Sunder et al polymerize to obtain branched polymers. However, the rejection is now moot in view of the present amendment to claim 1.

Finally, the rejection of claims 5, 6, 28, 29 and 33-35 for obviousness over

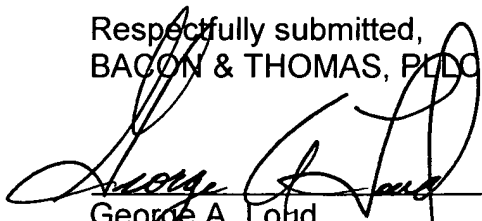
Toshifumi et al in view of Satoh et al and further in view of Kamada et al is traversed. As noted above Toshifumi et al is of little or no relevance. Only point in common between Toshifumi et al and the invention defined by claim 1 is that Toshifumi et al produce a hyperbranched polymer. One would not have used one of the monomers of Satoh et al to obtain the hyperbranched polymers of Toshifumi et al because Satoh et al describe obtaining only linear polymers and copolymers from the monomers they disclose, not branched and certainly not “hyperbranched”. Satoh et al teach the polymerization of 1,2:5,6-dianhydro-L-iditol dimethyl ether alone and with 1,2:5,6-dianhydro-D-manitol dimethyl ether to obtain linear polymers and copolymers having 2,5-anhydro-D-glucitol as a structural repeating unit. The teachings of Toshifumi et al are limited to a specific polymerization protocol using the specific monomers mentioned therein and there is no apparent reason why one would use other monomers in their reaction scheme. The monomers of Satoh et al cannot be considered chemical equivalents of those of Toshifumi et al

With regard to Kamada et al, again there is no reason apparent from the reference teachings or from the Examiner’s comments why one skilled in the art would have added anything from Kamada et al to the reference combination. Kamada et al report that “The hydration of the diepoxides afforded the five- and six-membered cyclic compounds as model compounds for the constitutional units of polymers,” quoting from page 1 (emphasis added). More specifically, they report the hydration of diepoxide compounds 2, 3 and 4 (bottom of page 3667) to obtain, as products, the compounds D-5, D-6, D-7 and D-8 shown in Table 1 at page 3668. There is no

suggestion in Kamada et al that the diepoxides per se should be polymerized.

For the foregoing reasons, reconsideration of the rejections is respectfully requested.

Respectfully submitted,  
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February 15, 2008

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